

**DRAFT SCREENING SITE INVESTIGATION  
FOR THE  
ELECTRIC STORAGE BATTERY SITE  
(aka Remington Rand Univac, aka Technitrol Inc.)  
19<sup>TH</sup> STREET AND ALLEGHENY AVENUE  
PHILADELPHIA, PENNSYLVANIA  
ECKEL SITE NUMBER 52**

Prepared for

U.S. Environmental Protection Agency Region 3  
Hazardous Property Cleanup Division  
1650 Arch Street  
Philadelphia, PA 19103

Prepared by

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## **1.0 INTRODUCTION**

Under Remedial Action Contract (RAC) No. 68-S7-3002, Work Assignment No. 048-PAPA-03ZZ, U.S. Environmental Protection Agency (EPA) Region 3 tasked Tetra Tech, Inc. (Tt), to assist EPA Region 3 in the assessment of properties suspected to have been former lead smelter foundries. Tt subcontracted completion of this work assignment to Tetra Tech EM Inc. (Tetra Tech).

Former lead smelter sites nationwide were identified in an April 2001 article published in the American Journal of Public Health by Eckel, and others (Eckel study) (Reference [Ref.] 1). The majority of these lead smelters operated prior to 1964 and closed before the current environmental regulations were instituted. As part of the Eckel study, soil samples were collected from several of the identified former lead smelter properties. Results from the analysis of these soil samples indicated that concentrations of lead exceeded EPA's recommended screening level for lead in residential soils. The results of the Eckel study indicate that the air disposition of lead into soils from the former smelter operations may present an ongoing public health concern due to exposure of residential populations, especially children, located in the vicinity of these former lead smelters, to soils containing elevated concentrations of lead (Refs. 1, 2, and 3).

The Eckel study identified 77 properties that may have been formerly used as lead smelters within EPA Region 3 (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia). EPA Region 3 is currently investigating these 77 properties. The objective of EPA's investigation of these properties is to (1) determine the potential for lead-contaminated soil to be present at the former lead smelter site or nearby properties (2) identify any populations that may be at risk to exposure to this soil, and (3) determine if soil sampling is warranted at any of these sites or nearby properties.

The following activities were completed as part of the initial screening investigation of each of these former lead smelter sites: (1) verify the former lead smelter address listed in the Eckel study through historical Sanborn fire insurance maps, tax parcel information, and/or contacting local agencies, (2) determine if the site is listed in EPA's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database, (3) determine through census information and existing maps the number of schools, daycare centers or recreational parks that exist near the former lead smelter site, (4) determine the population residing within a 4-mile radius of the site, (5) conduct a windshield reconnaissance of the site and surrounding area to document the current land use, identify any exposed soil and verify the existence of any schools, daycare centers or parks in the immediate area, and (6) review all information acquired to determine if the collection and analysis of soil samples is warranted at the site or at any nearby property.

This report summarizes the findings of the tasks outlined above for the former lead smelter known as the Electric Storage Battery site located at the intersection of 19<sup>th</sup> Street and Allegheny Avenue in Philadelphia, Pennsylvania, 19132. Each former smelter property was given a number in Eckel's study. The Eckel study number for this site is 52 (Ref. 1).

## **2.0 SITE LOCATION**

The former Electric Storage Battery facility was located at the intersection of 19<sup>th</sup> Street and Allegheny Avenue in Philadelphia, Pennsylvania, 19132. The geographic coordinates of the former Electric Storage facility are 40.002600° north latitude and 75.160800° west longitude on the Germantown, Pennsylvania Quadrangle, 7.5 minute series, United States Geological Survey topographic map (see Appendix A, Figure 1). The two sites that are listed on Eckel's list as aliases are listed in EPA's CERCLIS database (Ref. 4). These sites are known as Remington Rand Univac, CERCLIS ID No. PAD980539621, located at 19<sup>th</sup> and Allegheny Avenue, and Technitrol Inc., CERCLIS ID No. PAD002300556, located at 1952 East Allegheny Avenue. An aerial photograph of the vicinity of the former lead smelter site has been included in Appendix A, Figure 2. This aerial photograph reveals the exposed soils and any identified areas of

potential concern such as schools, daycare centers, or parks located within a half-mile radius of the site.

### **3.0 SITE OBSERVATIONS**

On October 13, 2005, Tetra Tech completed a non-sampling windshield reconnaissance of the Electric Storage site and surrounding area. A photographic record of the current site conditions is included in Appendix B. Figure 3, shows the current layout of the site and surrounding area as observed during Tetra Tech's site reconnaissance. The following observations were recorded:

- The subject property is located on the northeast corner of 19<sup>th</sup> Street and Allegheny Avenue, Philadelphia, Pennsylvania. The property consists of an approximately ten story self-storage building.
- The property is located in a primarily residential area with some light industrial and commercial buildings.
- Residential homes are located in the immediate vicinity of the subject property along 19<sup>th</sup> Street, north of the site. A vacant lot is located across the street from the subject property on the southern side of Allegheny Avenue. A deli and sandwich shop is located across from the subject property on the northwest corner of 19<sup>th</sup> Street and Allegheny Avenue.
- A daycare center was identified approximately 0.17 miles east of the subject property on the corner of 17<sup>th</sup> Street and Allegheny Avenue.
- Exposed soil was observed on the vacant lot across the street from the subject property and in the small yards of the residential homes in the immediate vicinity of the subject property.
- No schools or parks were identified in the immediate vicinity of the subject property.

#### 4.0 POTENTIAL TARGETS

Potential targets identified that may be exposed to lead-contaminated soils remaining in the vicinity of the former Electric Storage Battery site include the nearby residential population, children attending schools or daycare centers, and any workers that may be employed at or in the nearby vicinity of the site. The residential population within a 4-mile radius of the site is summarized in the table below (Ref. 5).

**Population Within a Four-mile Radius of the Site**

<b>Distance Ring (miles)</b>	<b>Population (number of persons)</b>
0.0 to 0.25	2,186
0.25 to 0.5	10,736
0.5 to 1.0	41,552
1.0 to 2.0	152,333
2.0 to 3.0	207,358
3.0 to 4.0	243,081

Source: U.S. Department of Commerce. Landview V Environmental Mapping Software based on the Bureau of Census 2000 Population Data. December 6, 2005.

A daycare center was identified approximately 0.17 miles east of the subject property. Four schools were identified within one-half mile of the site. Saint Joseph School is located approximately 1,000 feet northeast of the site. Kenderton School and Saint Mary's School are located approximately one-third mile northeast and west of the site, respectively. Holy Souls School is located approximately one-half mile north of the site. No parks were identified within one-half mile of the site.

#### 5.0 FINDINGS AND RECOMMENDATIONS

The site is located in a primarily residential area of Philadelphia, Pennsylvania with some light industrial and commercial properties. A preliminary assessment (PA) of the site has been prepared in 1987, and a no further remedial action plan (NFRAP) determination was recorded by

EPA. A nearby site, which is also listed as an alias to the Electric Storage Battery site, Technitrol Inc. has also received a NFRAP determination from EPA based on a PA completed in 1990. The PAs completed for most likely only addressed the actual sites. Therefore, it is recommended that the PA reports for the sites be reviewed and if necessary, samples should be collected of the exposed soils in the nearby vicinity of the sites and analyzed for lead levels.

## REFERENCES

1. Eckel, W.P., Rabinowitz, M.B., Foster, G.D. American Journal of Public Health. "Discovering Unrecognized Lead-Smelting Sites by Historical Methods". April 2001.
2. Pennsylvania Department of Health. Suspected Former Lead Smelter Sites: A Potential Risk Factor for Childhood Lead Poisoning. August 2004.
3. U.S. Environmental Protection Agency (EPA). Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities. OSWER Directive 9355.4-12. July 14, 1994.
4. U.S. EPA. Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) database. On-Line Address: <http://cfpub.epa.gov/superepad/cursites/srchsites.cfm>
5. U.S. Census Bureau. State and County Quick Facts. Accessed On-Line on December 6, 2005. On-Line Address: [quickfacts.census.gov/qfd/states/42.html](http://quickfacts.census.gov/qfd/states/42.html).



## **APPENDIX A**

### **Figures**





0 500 1,000  
Feet  
Scale in Feet

**Electric Storage Battery**  
19th Street and Allegheny Street  
Philadelphia, Pennsylvania  
Eckel Site No. 52

### Legend

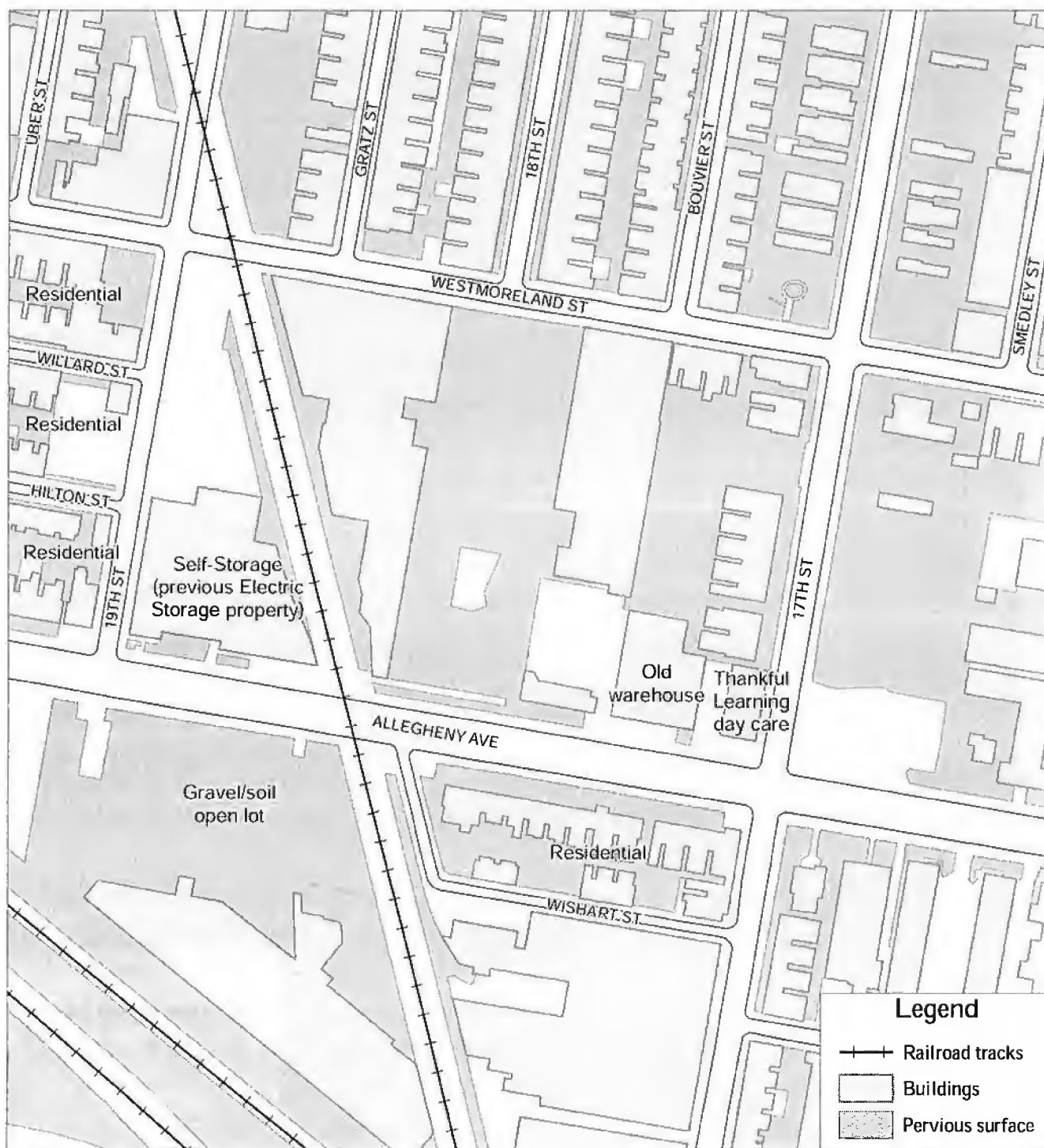
- Approximate Site Location
- School
- 0.5-Mile Radius
- Parks



**Figure 2**  
**Aerial Photograph**

Source: Modified from Digital Orthophoto (DOQQ) MrSID mosaic for  
Germantown Quadrangle (NAPP III, 1997-2001)  
Philadelphia Quadrangle (NAPP III, 1997-2001)





0 100 200  
Feet  
Scale in Feet

Electric Storage Battery  
19th Street and Allegheny Street  
Philadelphia, Pennsylvania  
Eckel Site No. 52



Figure 3  
Site Layout Map

Source: Modified from Philadelphia City Planning Commission  
(PCPC) Department - GIS Division, 2006.





**APPENDIX B**  
**Photographic Documentation**



## ***Photographic Documentation***

**Site Name:** Electric Storage Battery – Eckel Number 52  
**Location:** 19<sup>th</sup> Street and Allegheny Avenue,  
Philadelphia, Pennsylvania

**Prepared by:** Tetra Tech EM Inc.  
**Photographer:** [REDACTED]

### **Photograph No. 1**

**Photograph Date:**  
October 13, 2005

**Description:** Self-Storage  
company located on former  
Electric Storage Battery property.



### **Photograph No. 2**

**Photograph Date:** October 13,  
2005

**Description:** Vacant lot located  
on the south side of Allegheny  
Avenue across from the former  
Electric Storage Battery.







## **Photographic Documentation**

**Site Name:** Electric Storage Battery – Eckel Number 52  
**Location:** 19<sup>th</sup> Street and Allegheny Avenue,  
Philadelphia, Pennsylvania

**Prepared by:** Tetra Tech EM Inc.  
**Photographer:** [REDACTED]

### **Photograph No. 3**

**Photograph Date:**  
October 13, 2005

**Description:** Deli and sandwich shop located on northwest corner of 19<sup>th</sup> Street and Allegheny Avenue.



### **Photograph No. 4**

**Photograph Date:**  
October 13, 2005

**Description:** Sandwich shop and residential homes located on the west side of Allegheny Avenue north of the former Electric Storage Battery property.



